To: Christian, Megan[Christian.Megan@epa.gov]; Yamada, Richard

(Yujiro)[yamada.richard@epa.gov]

Cc: Fleming, Megan[Fleming.Megan@epa.gov]

From: Rodan, Bruce

Sent: Thur 2/8/2018 7:40:03 PM

Subject: FW: BRUCE REVIEW: IOAA review RE: OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)

RE: ORD review OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)

Methane Draft Report -- for for agency review -- 1-31-18 EDT.PDF

Brantley Thoma et al 2015.pdf

AWAM conference 2012 paper a411 7.pdf 2012 AWMA Meetion Proceedings TOC.pdf

Megan, Richard,

As in my previous note, I don't have any comments on this OIG report or on the minor EPA comments inserted. In response to my questions to NRMRL, Dr. Eben Thoma kindly provided me with the journal articles that he had referenced in his comments (attached), to help OIG address them.

Richard, the ball is in your court, but this is quick and you could just say "make it so."

Bruce D. Rodan

Associate Director for Science

U.S. EPA, Office of Research and Development

From: Christian, Megan

Sent: Thursday, February 8, 2018 10:31 AM **To:** Rodan, Bruce < rodan.bruce@epa.gov>

Cc: Fleming, Megan < Fleming. Megan@epa.gov>

Subject: RE: BRUCE REVIEW: IOAA review RE: OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)

Good morning Bruce,
It is my understanding that Megan F is out of the office today.
If you have any comments/edits on the attached draft report, please let me know by COB today.
Thank you,
Megan
Megan Christian, MPH
Office of Research and Development
U.S. Environmental Protection Agency
Christian.Megan@epa.gov
202-564-6184
From: Christian, Megan Sent: Tuesday, February 06, 2018 5:26 PM To: Fleming, Megan < Fleming. Megan@epa.gov > Subject: BRUCE REVIEW: IOAA review RE: OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)
Megan,
Please request that Bruce review the attached NRMRL's comments in response to the OIG draft

report on methane emissions entitled, EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production.

Due to fast turn-around time, pelase request that Bruce provide any edits/comments/approval by COB Thursday, February 8th.

Thank you,

Megan

Megan Christian, MPH

Office of Research and Development

U.S. Environmental Protection Agency

Christian.Megan@epa.gov

202-564-6184

From: Hingeley, Maureen

Sent: Tuesday, February 06, 2018 3:41 PM

To: ORD-IOAA-Front Office Support < ORDIOAASUPPORT@epa.gov>

Cc: Silzer, Stefan < Silzer. Stefan @epa.gov >; Heckman, Deborah

< <u>Heckman.Deborah@epa.gov</u>>; Cursio, Heather < <u>Cursio.Heather@epa.gov</u>>; Kim, Hyon < <u>Kim.Hyon@epa.gov</u>>

Subject: IOAA review RE: OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)

Good afternoon,

For the IOAA's review/concurrence attached are NRMRL's comments in response to the OIG draft report on methane emissions entitled, *EPA Did Not Use Allegedly Flawed*

Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production. During the course of the OIG audit, NRMRL's Eben Thoma provided technical expertise regarding methane emissions-related research ORD has conducted and planning to conduct. Eben's comments identify a few minor edits (pg. 2 of 17, pg. 14(x2), and pg. 16). NRMRL management has provided concurrence (see email attachment). For audit report summary details, please reference the email below.

Following the IOAA's review, OPARM can deliver the comments to OAR to include in the agency's collective submission.

Please note OAR has requested **ORD's comments no later than Feb 13**th.

If there are any questions or additional information is needed, please let me know. Thank you.

Maureen Hingeley

Office of Program Accountability and Resource Management

Office of Research and Development

US EPA

202-564-1306 (office)

202-875-9628 (mobile)

From: Hingeley, Maureen

Sent: Thursday, February 01, 2018 9:55 AM

To: Orme-Zavaleta, Jennifer < Orme-Zavaleta.Jennifer@epa.gov >; Rodan, Bruce

<rodan.bruce@epa.gov>; Robbins, Chris <Robbins, Chris@epa.gov>; Radzikowski, Mary Ellen

< <u>Radzikowski.Maryellen@epa.gov</u>>; ORD-IOAA-Front Office Support

< ORDIOAASUPPORT@epa.gov>

Cc: Sonich-Mullin, Cynthia < Sonich-Mullin.Cynthia@epa.gov >; Gilliland, Alice

< <u>Gilliland.Alice@epa.gov</u>>; Silzer, Stefan < <u>Silzer.Stefan@epa.gov</u>>; Heckman, Deborah

< <u>Heckman.Deborah@epa.gov</u>>; Cursio, Heather < <u>Cursio.Heather@epa.gov</u>>; Kim, Hyon

< Kim. Hyon@epa.gov>

Subject: OIG Draft Report: "EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production" (Project No. OPE-FY17-0017)

Good morning,

For agency review, the OIG issued the attached draft report on methane emissions entitled, *EPA Did Not Use Allegedly Flawed Studies to Estimate Methane Emissions or Set New Source Performance Standards for Oil and Natural Gas Production.* Please note the report does not contain any recommendations and is addressed to OAR, which has been the principle office involved in the audit. However, due to technical discussions with NRMRL regarding the methane emissions-related research ORD has conducted and is planning to conduct, the OIG has asked for ORD's review.

In summary, the OIG found that EPA staff were aware of potential concerns raised about the EDF/UT-Austin studies and used the agency's internal review processes to evaluate data and solicit stakeholder feedback. Specifically, the report found that EPA used its annual Greenhouse Gas Inventory development process to consider data from the studies, and sought stakeholder feedback on aspects of the studies through memorandums when developing the 1990–2013 and 1990–2014 inventories. The OIG notes that EPA ultimately did not make any changes to the inventory or to the Greenhouse Gas Reporting Program based on data from the studies.

The audit objectives were to determine (1) how the EPA estimates methane emissions from oil and natural gas production, including whether the EPA used results from the two EDF/UT-Austin studies to estimate emissions; and (2) whether concerns about technical or other problems with the studies were identified or brought to the EPA's attention, and how the EPA addressed and resolved those concerns.

OPARM is working with NRMRL to prepare edits/comments for the IOAA's review by **Tuesday Feb 6**th. OPARM will coordinate with the IOAA special assistants for the IOAA's concurrence prior to sending the edits/comments to OAR. Please note the OIG has provided an unusually short timeframe to submit agency comments.

If there are any questions or additional information is needed, please let me know. Thank you.

Maureen Hingeley

Office of Program Accountability and Resource Management

Office of Research and Development

US EPA

202-564-1306 (office)

202-875-9628 (mobile)